(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 2 December 2004 (02.12.2004)

PCT

(10) International Publication Number WO 2004/105070 A2

(51) International Patent Classification⁷:

H₀₁J

(21) International Application Number:

PCT/US2004/015079

(22) International Filing Date:

13 May 2004 (13.05.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/470,635

15 May 2003 (15.05.2003) US

60/470,734

15 May 2003 (15.05.2003) US

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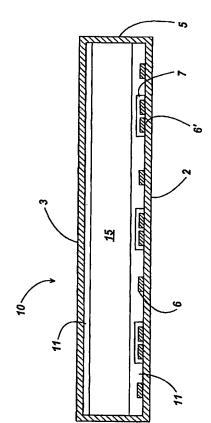
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,

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(54) Title: VUV-EXCITED DEVICE WITH BLUE-EMITTING PHOSPHOR



(57) Abstract: Blue-emitting phosphors for use with plasma display panels (PDP) or other vacuum ultraviolet-excited (VUV) devices are provided. These blue-emitting phosphors and mixtures thereof include at least a europium-activated calcium-substituted barium hexa-aluminate (CBAL) phosphor. Preferably, the CBAL phosphor has a composition which may be represented by the formula: Ba $_{1.29 \times y} \text{Ca}_x \text{Eu}_y \text{Al}_{12} \text{O}_{19.29}$, wherein 0 < x < 0.25 and 0.01 < y < 0.20. These blue-emitting phosphors exhibit improved degradation characteristics, including reduced color shift and increased intensity maintenance, under conditions found in VUV-excited devices.



WO 2004/105070 A2



(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

 without international search report and to be republished upon receipt of that report

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